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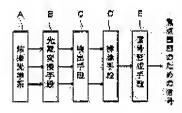
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(21) Application number: **01-306152** (71) Applicant: **NIKON CORP** (22) Date of filing: **24.11.1989** (72) Inventor: **UTAGAWA**

TAKESHI

(54) **FOCUS DETECTOR**



(57) Abstract:

PURPOSE: To detect the focus of a subject having periodic patterns by separating the subject image to at least the three nearly identical optical images having a parallax and detecting the relative positions of the light images. CONSTITUTION: This device has image formation optical system A, photoelectric converting means B, detecting means C, eliminating means D and signal forming means E. The subject image is separated by the image formation optical system A to at least the three nearly identical light images which are projected onto the respectively corresponding photoelectric converting means B. The relative positions of two pairs of the light images obtd. by the image formation optical system of different inter-axis distances are computed in the detecting

means C in accordance with the outputs from the photoelectric converting means B and further both are compared and computed by the eliminating means D, by which the results of the focus detection of the high correlation arising from false focusing are eliminated. The exact focus detection is executed in this way even with the periodic patterns.